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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,002	08/27/2003	Jae-Hwan Kim	678-1006 (P10433)	5919
28249 7590 05/21/2007 DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. SUITE 702 UNIONDALE, NY 11553			EXAMINER PHUONG, DAI	
			ART UNIT 2617	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/649,002	Applicant(s) KIM, JAE-HWAN	
	Examiner Dai A. Phuong	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 6-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-12 and 14-15 is/are rejected.
- 7) ☒ Claim(s) 6 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau. (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

1. Applicant's arguments, filed 02/27/2007, with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Claim 5 has been canceled. Claims 1-4 and 6-15 are currently pending.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al. (U.S. 5724492) in view of Aberg (U.S. 6993362).

Regarding claim 1, Matthews, III et al. disclose a device for organizing a menu in a mobile communication terminal (fig. 10, col. 1, lines 61-65 and col. 17, lines 45-55), comprising: a control unit for enabling multi-dimensional navigation between the generated menu planes (col. 20, lines 37-48); and a display unit 155 for receiving the menu planes from the control unit and displaying the received menu planes under control of the control unit (col. 20, lines 37-48).

However, Matthews, III et al. do not disclose a control unit for dynamically generating and deleting a plurality of menu planes according to a user's setting, each plane including at least one menu item, wherein when a user registers a menu, the control unit generates a plurality of menu planes including at least one user menu registration slot connected to the registered menu,

and, if a menu selection cursor moves from at least one user menu registration slot in a first menu plane of the plurality of menu planes so as to exit the first menu plane, the control unit moves the menu selection cursor to a second menu plane of the plurality of menu planes.

In the same field of endeavor, Aberg discloses a control unit for dynamically generating and deleting a plurality of menu planes according to a user's setting, each plane including at least one menu item, wherein when a user registers a menu, the control unit generates a plurality of menu planes including at least one user menu registration slot connected to the registered menu, and, if a menu selection cursor moves from at least one user menu registration slot in a first menu plane of the plurality of menu planes so as to exit the first menu plane, the control unit moves the menu selection cursor to a second menu plane of the plurality of menu planes (fig. 3, col. 6, line 6 to col. 7, line 15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the handheld computer by Matthews, III et al. specifically including disclose a control unit for dynamically generating and deleting a plurality of menu planes according to a user's setting, each plane including at least one menu item, wherein when a user registers a menu, the control unit generates a plurality of menu planes including at least one user menu registration slot connected to the registered menu, and, if a menu selection cursor moves from at least one user menu registration slot in a first menu plane of the plurality of menu planes so as to exit the first menu plane, the control unit moves the menu selection cursor to a second menu plane of the plurality of menu planes, as taught by Aberg, the motivation being in order to customize the short menu system and improve menu system for a portable communication apparatus which is easily accessible.

Regarding claim 2, the combination of Matthews, III et al. and Aberg disclose all the limitation in claim 1. Further, Aberg discloses the device wherein a user can add at least one menu item (fig. 3, col. 6, line 6 to col. 7, line 15).

Regarding claim 3, the combination of Matthews, III et al. and Aberg disclose all the limitation in claim 1. Further, Aberg discloses the device wherein a user can delete said at least one menu item (fig. 3, col. 6, line 6 to col. 7, line 15).

Regarding claim 4, the combination of Matthews, III et al. and Aberg disclose all the limitation in claim 1. Further, Matthews, III et al. disclose the device wherein if the number of menu items on one of the plurality of menu planes exceeds a maximum allowable number of menu items, the control unit generates a new menu plane (col. 18, lines 2-8).

Regarding claim 7, the combination of Matthews, III et al. and Aberg disclose all the limitation in claim 1. Further, Aberg discloses the device wherein each menu registration slot in the plurality of menu planes is spatially continuous with and connected to a menu registration slot in its neighboring menu plane (fig. 3, col. 6, line 6 to col. 7, line 15).

Regarding claim 8, the combination of Matthews, III et al. and Aberg discloses all the limitation in claim 7. Further, Aberg discloses the device wherein when the menu selection cursor positioned in one of the menu registration slot is moved by the user, the control unit moves the menu selection cursor to a menu registration slot in a menu plane adjacent to the menu registration slot (fig. 3, col. 6, line 6 to col. 7, line 15).

Regarding claim 9, the combination of Matthews, III et al. and Aberg discloses all the limitation in claim 1. Further, Aberg discloses the device wherein selecting a key once moves

the menu selection cursor positioned in said at least one user menu registration slot connected to the registered menu in the plurality of menu planes to another menu plane of the plurality of menu planes (fig. 3, col. 6, line 6 to col. 7, line 15).

Regarding claim 10, the combination of Matthews, III et al. and Aberg disclose all the limitation in claim 1. Further, Matthews, III et al. disclose the device wherein when the menu selection cursor moves to the second menu plane, the control unit causes the display unit to display a moving three-dimensional image such that a polyhedron including the first and second menu planes is rotated to change its front view from one menu plane to another menu plane (col. 20, lines 37-48).

4. Claims 11-12 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (Pub. No: 20010055038) in view of Matthews, III et al. (U.S. 5,724,492).

Regarding claim 11, Kim discloses a method for organizing a menu in a mobile communication terminal, comprising:

when a menu is registered by a user, generating a first menu plane including at least one menu registration slot associated with the registered menu; and registering the menu to a menu registration slot of the generated menu plane ([0036] to [0045]).

However, Kim does not disclose a first menu plane of a polyhedron or a menu plane of a polyhedron.

In the same endeavor, Matthews, III et al. disclose a first menu plane of a polyhedron or a menu plane of a polyhedron (col. 19, line 44 to col. 20, line 27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile communication terminal of by specifically including a first menu plane of a polyhedron or a menu plane of a polyhedron, as taught by Matthews, III et al., the motivation being in order to conserve display space and provides contextual clues by providing a three-dimensional menu object.

Regarding claim 12, the combination of Kim and Matthews, III et al. disclose all the limitation in claim 11. Further, Kim discloses the method further comprising the step of generating a second menu plain including at least one menu registration slot when a menu is additionally registered by the user ([0036] to [0045]).

Regarding claim 15, the combination of Kim and Matthews, III et al. disclose all the limitation in claim 11. Further, Kim discloses the method wherein the menu selection cursor positioned in said at least one user menu registration slot connected to a registered menu in the plurality of menu planes can move to another menu plane of the plurality of menu planes by selecting a key once ([0036] to [0045]).

Regarding claim 14, the combination of Kim and Matthews, III et al. disclose all the limitation in claim 12. Further, Matthews, III et al. disclose the method further comprising: displaying a moving three-dimensional image on a display unit such that a polyhedron including the first and second menu planes is rotated to change its front view from one menu plane to another menu plane, when the menu selection cursor moves to the second menu plane (col. 17, lines 45-62).

***Reasons Subject Matter***

5. Claims 6 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 6, the prior art record does not disclose nor fairly suggest the device wherein when there is an empty menu registration slot in the new menu plane, *the control unit enables the empty menu item slot to inherit a menu item of a menu registration slot in a previous menu plane, the menu registration slot of the previous menu plane corresponding to the empty menu item slot, and the control unit enables the display unit to display the inherited menu item on the empty menu item slot.*

Regarding claim 13, the prior art record does not disclose nor fairly suggest the method further comprising the step of: if a menu selection cursor moves from said at least one menu registration slot so as to exit the first menu plane of the plurality of menu planes, displaying the second menu plane of the plurality of menu planes; and *if there is an empty menu registration slot in the second menu plane, enabling the empty menu item slot to inherit a menu item of a menu registration slot in the first menu plane corresponding to the empty menu item slot, and displaying the inherited menu item on the empty menu slot.*

***Response to Argument***

6. Applicant, on page 8 of his response, argues that Aberg teaches the "user may be provided with an option to delete a specific menu item 311, 312 from the dynamic sub-menu 310" this teaching goes to a two-dimensional menu as opposed to a menu with three-dimensional effect as disclosed in the present application and regard claim 1 includes the



recitation of a control unit for enabling multi-dimensional navigation between the generated menu planes, which is neither **taught nor suggested by Matthews or Aberg** or the combination thereof. However, the Examiner respectfully disagrees.

First, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **three-dimensional**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Second, the Applicant used a particular word in the claim, e.g., "multi-dimensional". During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550- 51 (CCPA 1969). The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999). See MPEP 2111.

The language used by Applicant is broad enough as explained in the Office Action (mailed 11/24/2006).

Third, Matthews discloses in Fig. 10 to Fig. 12 and column 19, line 44 to column 20, line 27 that the user taps the directional control buttons and causes the three-dimensional menu object to rotate in the direction indicated by the directional control. In response to applicant's

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arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

7. Applicant, on page 8 of his response, argues that the dynamic menu of Aberg is not for including more than one menu registration slot connected to the registered menu, unlike the menu plane taught by Claim 1 of the present invention. Aberg neither teaches nor reasonably suggests the structure for including at least one menu registration slot connected to the registered menu in each menu plane. However, the Examiner is respectfully disagreed. Aberg discloses in Fig. 3, column 6, line 6 to column 7, line 15 that the user may add any of the menu items 401 406 to the dynamic sub-menu 310 of the top-level SPECIAL menu 300. Furthermore, user is given an opportunity not only to add new menu items to the dynamic menu 310 but also to remove menu items therefrom.

8. Applicant, on page 8 of his response, argues that Kim was published on December 27, 2001. This application was filed on August 27, 2003, and claims priority dating to September 9, 2002, which is less than the statutory period of one (1) year. Therefore, the rejection does not meet the statutory requirement of 35 U.S.C. § 102(b). However, the Examiner is respectfully disagreed because 35 U.S.C. 102 (b) states that "the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States."

#### Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen M Duc can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-7503.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dai Phuong

AU: 2617

Date: 05/12/2007



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